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ABSTRACT

Providing guidance to teachers of young children in schools and early childhood programs, this paper presents a position statement that summarizes the current issues in learning to read and write and reviews what is known from research on young children's literacy development. This review of research (divided into sections birth through preschool, kindergarten, and the primary grades) as well as the collective wisdom and experience of members of the International Reading Association and the National Association for the Education of Young Children provides the basis for the position statement about what constitutes developmentally appropriate practice in early literacy over the period of birth through age eight. The paper concludes with recommendations for teaching practices and policies. (Contains 113 references and a continuum of children's development in early reading and writing.) (RS)

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Learning to Ready and Write: Developmentally Appropriate Practices for Young Children.

A Joint Position Statement of the International Reading Association and the National Association for the Education of Young Children

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Learning to Read and Write: Developmentally Appropriate Practices for Young Children

A joint position statement of the International Reading Association *and the* National Association for the Education of Young Children

Adopted May 1998

Learning to read and write is critical to a child's success in school and later in life. One of the best predictors of whether a child will function competently in school and go on to contribute actively in our increasingly literate society is the level to which the child progresses in reading and writing. Although reading and writing abilities continue to develop throughout the life span, the early childhood years—from birth through age eight—are the most important period for literacy development. It is for this reason that the International Reading Association (IRA) and the National Association for the Education of Young Children (NAEYC) joined together to formulate a position statement regarding early literacy development. The statement consists of a set of principles and recommendations for teaching practices and public policy.

The primary purpose of this position statement is to provide guidance to teachers of young children in schools and early childhood programs (including child care centers, preschools, and family child care homes) serving children from birth through age eight. By and large, the principles and practices suggested here also will be of interest to any adults who are in a position to influence a young child's learning and development—parents, grandparents, older siblings, tutors, and other community members.

Teachers work in schools or programs regulated by administrative policies as well as available resources. Therefore secondary audiences for this position statement are school principals and program administrators whose roles are critical in establishing a supportive climate for sound, developmentally appropriate teaching practices; and policymakers whose decisions determine whether adequate resources are available for high-quality early childhood education.

A great deal is known about how young children learn to read and write and how they can be helped toward literacy during the first five years of life. A great deal is known also about how to help children once compulsory schooling begins, whether in kindergarten or the primary grades. Based on a thorough review of the research, this document reflects the commitment of two major professional organizations to the goal of helping children learn to read well enough by the end of third grade so that they can read to learn in all curriculum areas. IRA and NAEYC are committed not only to helping young children learn to read and write but also to fostering and sustaining their interest and disposition to read and write for their own enjoyment, information, and communication.

First, the statement summarizes the current issues that are the impetus for this position; then it reviews what is known from research on young children's literacy development. This review of research as well as the collective wisdom and experience of IRA and NAEYC members provides the basis for a position statement about what constitutes developmentally appropriate practice in early literacy over the period of birth through age eight. The position concludes with recommendations for teaching practices and policies.

Statement of the issues

Why take a position on something as obviously important as children's learning to read and write? The IRA and NAEYC believe that this position statement will contribute significantly to an improvement in practice and the development of supportive educational policies. The two associations saw that a clear, concise position statement was needed at this time for several reasons.

- **It is essential and urgent to teach children to read and write competently, enabling them to achieve today's high standards of literacy.**

Although this country enjoys the highest literacy rate in its history, society now expects virtually everyone in the population to function beyond the minimum standards of literacy. Today the definition of *basic proficiency* in literacy calls for a fairly high standard of reading comprehension and analysis. The main reason is that literacy requirements of most jobs have increased significantly and are expected to increase further in the future. Communications that in the past were verbal (by phone or in person) now demand reading and writing—messages sent by electronic mail, Internet, or facsimile as well as print documents.

- **With the increasing variation among young children in our programs and schools, teaching today has become more challenging.**

Experienced teachers throughout the country report that the children they teach today are more diverse in their backgrounds, experiences, and abilities than were those they taught in the past. Kindergarten classes now include children who have been in group settings for three or four years as well as children who

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are participating for the first time in an organized early childhood program. Classes include both children with identified disabilities and children with exceptional abilities, children who are already independent readers and children who are just beginning to acquire some basic literacy knowledge and skills. Children in the group may speak different languages at varying levels of proficiency. Because of these individual and experiential variations, it is common to find within a kindergarten classroom a five-year range in children's literacy-related skills and functioning (Riley 1996). What this means is that some kindergartners may have skills characteristic of the typical three-year-old, while others might be functioning at the level of the typical eight-year-old. Diversity is to be expected and embraced, but it can be overwhelming when teachers are expected to produce uniform outcomes for all, with no account taken of the initial range in abilities, experiences, interests, and personalities of individual children.

- **Among many early childhood teachers, a maturationist view of young children's development persists despite much evidence to the contrary.**

A readiness view of reading development assumes that there is a specific time in the early childhood years when the teaching of reading should begin. It also assumes that physical and neurological maturation alone prepare the child to take advantage of instruction in reading and writing. The readiness perspective implies that until children reach a certain stage of maturity all exposure to reading and writing, except perhaps being read stories, is a waste of time or even potentially harmful. Experiences throughout the early childhood years, birth through age eight, affect the development of literacy. These experiences constantly interact with characteristics of individual children to determine the level of literacy skills a child ultimately achieves. Failing to give children literacy experiences until they are school-age can severely limit the reading and writing levels they ultimately attain.

- **Recognizing the early beginnings of literacy acquisition too often has resulted in use of inappropriate teaching practices suited to older children or adults perhaps but ineffective with children in preschool, kindergarten, and the early grades.**

Teaching practices associated with outdated views of literacy development and/or learning theories are still prevalent in many classrooms. Such practices include extensive whole-group instruction and intensive drill and practice on isolated skills for groups or individuals. These practices, not particularly effective for primary-grade children, are even less suitable and effective with preschool and kindergarten children. Young children especially need to be engaged in experiences that make academic content meaningful and build on prior learning. It is vital for all children to have literacy experiences in schools and early childhood programs. Such access is even more critical for children with limited home experiences in literacy. However, these school experiences must teach the broad range of language and literacy knowledge and skills to provide the solid foundation on which high levels of reading and writing ultimately depend.

- **Current policies and resources are inadequate in ensuring that preschool and primary teachers are qualified to support the literacy development of all children, a task requiring strong preservice preparation and ongoing professional development.**

For teachers of children younger than kindergarten age in the United States, no uniform preparation requirements or licensure standards exist. In fact, a high-school diploma is the highest level of education required to be a child care teacher in most states. Moreover, salaries in child care and preschool programs are too low to attract or retain better qualified staff. Even in the primary grades, for which certified teachers are required, many states do not offer specialized early childhood certification, which means many teachers are not adequately prepared to teach reading and writing to young children. All teachers of young children need good, foundational knowledge in language acquisition, including second-language learning, the processes of reading and writing, early literacy development, and experiences and teaching practices contributing to optimal development. Resources also are insufficient to ensure teachers continuing access to professional education so they can remain current in the field or can prepare to teach a different age group if they are reassigned.

What research reveals: Rationale for the position statement

Children take their first critical steps toward learning to read and write very early in life. Long before they can exhibit reading and writing production skills, they begin to acquire some basic understandings of the concepts about literacy and its functions. Children learn to use symbols, combining their oral language, pictures, print, and play into a coherent mixed medium and creating and communicating meanings in a variety of ways. From their initial experiences and interactions with adults, children begin to read words, processing letter-sound relations and acquiring substantial knowledge of the alphabetic system. As they continue to learn, children increasingly consolidate this information into patterns that allow for automaticity and fluency in reading and writing. Consequently reading and writing acquisition is conceptualized better as a developmental continuum than as an all-or-nothing phenomenon (see pp. 14–15 for an illustration of a developmental continuum).

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But the ability to read and write does not develop naturally, without careful planning and instruction. Children need regular and active interactions with print. Specific abilities required for reading and writing come from immediate experiences with oral and written language. Experiences in these early years begin to define the assumptions and expectations about becoming literate and give children the motivation to work toward learning to read and write. From these experiences children learn that reading and writing are valuable tools that will help them do many things in life.

The beginning years (birth through preschool)

Even in the first few months of life, children begin to experiment with language. Young babies make sounds that imitate the tones and rhythms of adult talk, they "read" gestures and facial expressions, and they begin to associate sound sequences frequently heard—words—with their referents (Berk 1996). They delight in listening to familiar jingles and rhymes, play along in games such as peek-a-boo and pat-a-cake, and manipulate objects such as board books and alphabet blocks in their play. From these remarkable beginnings children learn to use a variety of symbols.

In the midst of gaining facility with these symbol systems, children acquire through interactions with others the insights that specific kinds of marks—print—also can represent meanings. At first children will use the physical and visual cues surrounding print to determine what something says. But as they develop an understanding of the alphabetic principle, children begin to process letters, translate them into sounds, and connect this information with a known meaning. Although it may seem as though some children acquire these understandings magically or on their own, studies suggest that they are the beneficiaries of considerable, though playful and informal, adult guidance and instruction (Durkin 1966; Anbar 1986).

Considerable diversity in children's oral and written language experiences occurs in these years (Hart & Risley 1995). In home and child care situations, children encounter many different resources and types and degrees of support for early reading and writing (McGill-Franzen & Lanford 1994). Some children may have ready access to a range of writing and reading materials, while others may not; some children will observe their parents writing and reading frequently, others only occasionally; some children receive direct instruction, while others receive much more casual, informal assistance.

What this means is that no one teaching method or approach is likely to be the most effective for all children (Strickland 1994). Rather, good teachers bring into play a variety of teaching strategies that can encompass the great diversity of children in schools. Excellent instruction builds on what children already know, and can do, and provides knowledge, skills, and dispositions for lifelong learning. Children need to learn not only the technical skills of reading and writing but also how to use these tools to better their thinking and reasoning (Neuman in press).

The single most important activity for building these understandings and skills essential for reading success appears to be **reading aloud to children** (Wells 1985; Bus, Van Ijzendoorn, & Pellegrini 1995). High-quality book reading occurs when children feel emotionally secure (Bus & Van Ijzendoorn 1995; Bus et al. 1997) and are active participants in reading (Whitehurst et al. 1994). Asking predictive and analytic questions in small-group settings appears to affect children's vocabulary and comprehension of stories (Karweit & Wasik 1996). Children may talk about the pictures, retell the story, discuss their favorite actions, and request multiple rereadings. It is the talk that surrounds the storybook reading that gives it power, helping children to bridge what is in the story and their own lives (Dickinson & Smith 1994; Snow et al. 1995). Snow (1991) has described these types of conversations as "decontextualized language" in which teachers may induce higher-level thinking by moving experiences in stories from what the children may see in front of them to what they can imagine.

A central goal during these preschool years is to enhance children's **exposure to and concepts about print** (Clay 1979, 1991; Holdaway 1979; Teale 1984; Stanovich & West 1989). Some teachers use Big Books to help children distinguish many print features, including the fact that print (rather than pictures) carries the meaning of the story that the strings of letters between spaces are words and in print correspond to an oral version, and that reading progresses from left to right and top to bottom. In the course of reading stories, teachers may demonstrate these features by pointing to individual words, directing children's attention to where to begin reading, and helping children to recognize letter shapes and sounds. Some researchers (Adams 1990; Roberts in press) have suggested that the key to these critical concepts, such as developing word awareness, may lie in these demonstrations of how print works.

Children also need opportunity to practice what they've learned about print with their peers and on their own. Studies suggest that the physical arrangement of the classroom can promote time with books (Morrow & Weinstein 1986; Neuman & Roskos 1997). A key area is the classroom library—a collection of attractive stories and informational books—that provides children with immediate access to books. Regular visits to the school or public library and library card registration ensure that children's collections remain continually updated and may help children develop the habit of reading as lifelong learning. In comfortable library settings children often will pretend to read, using visual cues to remember the words of their favorite stories. Although studies have shown that these pretend readings are just that (Ehri & Sweet 1991), such visual readings may demonstrate substantial knowledge about the global features of reading and its purposes.

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Storybooks are not the only means of providing children with exposure to written language. Children learn a lot about reading from the labels, signs, and other kinds of print they see around them (McGee, Lomax, & Head 1988; Neuman & Roskos 1993). Highly visible print labels on objects, signs, and bulletin boards in classrooms demonstrate the practical uses of written language. In environments rich with print, children incorporate literacy into their dramatic play (Morrow 1990; Vukelich 1994; Neuman & Roskos 1997), using these communication tools to enhance the drama and realism of the pretend situation. These everyday, playful experiences by themselves do not make most children readers. Rather they expose children to a variety of print experiences and the processes of reading for real purposes.

For children whose primary language is other than English, studies have shown that a strong basis in a first language promotes school achievement in a second language (Cummins 1979). Children who are **learning English as a second language** are more likely to become readers and writers of English when they are already familiar with the vocabulary and concepts in their primary language. In this respect, oral and written language experiences should be regarded as an additive process, ensuring that children are able to maintain their home language while also learning to speak and read English (Wong Fillmore, 1991). Including non-English materials and resources to the extent possible can help to support children's first language while children acquire oral proficiency in English.

A fundamental insight developed in children's early years through instruction is the **alphabetic principle,** the understanding that there is a systematic relationship between letters and sounds (Adams 1990). The research of Gibson and Levin (1975) indicates that the shapes of letters are learned by distinguishing one character from another by its type of spatial features. Teachers will often involve children in comparing letter shapes, helping them to differentiate a number of letters visually. Alphabet books and alphabet puzzles in which children can see and compare letters may be a key to efficient and easy learning.

At the same time children learn about the sounds of language through exposure to **linguistic awareness** games, nursery rhymes, and rhythmic activities. Some research suggests that the roots of phonemic awareness, a powerful predictor of later reading success, are found in traditional rhyming, skipping, and word games (Bryant et al. 1990). In one study, for example (Maclean, Bryant, & Bradley 1987), researchers found that three-year-old children's knowledge of nursery rhymes specifically related to their more abstract phonological knowledge later on. Engaging children in choral readings of rhymes and rhythms allows them to associate the symbols with the sounds they hear in these words.

Although children's facility in **phonemic awareness** has been shown to be strongly related to later reading achievement, the precise role it plays in these early years is not fully understood. Phonemic awareness refers to a child's understanding and conscious awareness that speech is composed of identifiable units, such as spoken words, syllables, and sounds. Training studies have demonstrated that phonemic awareness can be taught to children as young as age five (Bradley & Bryant 1983; Lundberg, Frost, & Petersen 1988; Cunningham 1990; Bryne & Fielding-Barnsley 1991). These studies used tiles (boxes) (Elkonin 1973) and linguistic games to engage children in explicitly manipulating speech segments at the phoneme level. Yet, whether such training is appropriate for younger-age children is highly suspect. Other scholars find that children benefit most from such training only after they have learned some letter names, shapes, and sounds and can apply what they learn to real reading in meaningful contexts (Cunningham 1990; Foorman et al. 1991). Even at this later age, however, many children acquire phonemic awareness skills without specific training but as a consequence of learning to read (Wagner & Torgesen 1987; Ehri 1994). In the preschool years sensitizing children to sound similarities does not seem to be strongly dependent on formal training but rather from listening to patterned, predictable texts while enjoying the feel of reading and language.

Children acquire a working knowledge of the alphabetic system not only through reading but also through writing. A classic study by Read (1971) found that even without formal spelling instruction, preschoolers use their tacit knowledge of phonological relations to spell words. **Invented spelling** (or phonic spelling) refers to beginners' use of the symbols they associate with the sounds they hear in the words they wish to write. For example, a child may initially write *b* or *bk* for the word *bike*, to be followed by more conventionalized forms later on.

Some educators may wonder whether invented spelling promotes poor spelling habits. To the contrary, studies suggest that *temporary* invented spelling may contribute to beginning reading (Chomsky 1979; Clarke 1988). One study, for example, found that children benefited from using invented spelling compared to having the teacher provide correct spellings in writing (Clarke 1988). Although children's invented spellings did not comply with correct spellings, the process encouraged them to think actively about letter-sound relations. As children engage in writing, they are learning to segment the words they wish to spell into constituent sounds.

Classrooms that provide children with regular opportunities to express themselves on paper, without feeling too constrained for correct spelling and proper handwriting, also help children understand that writing has real purpose (Graves 1983; Sulzby 1985; Dyson 1988). Teachers can organize situations that both demonstrate the writing process and get children actively involved in it. Some teachers serve as scribes and help children write down their ideas, keeping in mind the balance between

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children doing it themselves and asking for help. In the beginning these products likely emphasize pictures with few attempts at writing letters or words. With encouragement, children begin to label their pictures, tell stories, and attempt to write stories about the pictures they have drawn. Such novice writing activity sends the important message that writing is not just handwriting practice—children are using their own words to compose a message to communicate with others.

Thus the picture that emerges from research in these first years of children's reading and writing is one that emphasizes wide exposure to print and to developing concepts about it and its forms and functions. Classrooms filled with print, language and literacy play, storybook reading, and writing allow children to experience the joy and power associated with reading and writing while mastering basic concepts about print that research has shown are strong predictors of achievement.

In kindergarten

Knowledge of the forms and functions of print serves as a foundation from which children become increasingly sensitive to letter shapes, names, sounds, and words. However, not all children typically come to kindergarten with similar levels of knowledge about printed language. Estimating where each child is developmentally and building on that base, a key feature of all good teaching, is particularly important for the kindergarten teacher. Instruction will need to be adapted to account for children's differences. For those children with lots of print experiences, instruction will extend their knowledge as they learn more about the formal features of letters and their sound correspondences. For other children with fewer prior experiences, initiating them to the alphabetic principle, that a limited set of letters comprises the alphabet and that these letters stand for the sounds that make up spoken words, will require more focused and direct instruction. In all cases, however, children need to interact with a rich variety of print (Morrow, Strickland, & Woo 1998).

In this critical year kindergarten teachers need to capitalize on every opportunity for enhancing children's **vocabulary development.** One approach is through listening to stories (Feitelson, Kita, & Goldstein 1986; Elley 1989). Children need to be exposed to vocabulary from a wide variety of genres, including informational texts as well as narratives. The learning of vocabulary, however, is not necessarily simply a byproduct of reading stories (Leung & Pikulski 1990). Some explanation of vocabulary words prior to listening to a story is related significantly to children's learning of new words (Elley 1989). Dickinson and Smith (1994), for example, found that asking predictive and analytic questions before and after the readings produced positive effects on vocabulary and comprehension.

Repeated readings appear to further reinforce the language of the text as well as to familiarize children with the way different genres are structured (Eller, Pappas, & Brown 1988; Morrow 1988). Understanding the forms of informational and narrative texts seems to distinguish those children who have been well read to from those who have not (Pappas 1991). In one study, for example, Pappas found that with multiple exposures to a story (three readings), children's retelling became increasingly rich, integrating what they knew about the world, the language of the book, and the message of the author. Thus, considering the benefits for vocabulary development and comprehension, the case is strong for interactive storybook reading (Anderson 1995). Increasing the volume of children's playful, stimulating experiences with good books is associated with accelerated growth in reading competence.

Activities that help children clarify the **concept of word** are also worthy of time and attention in the kindergarten curriculum (Juel 1991). Language experience charts that let teachers demonstrate how talk can be written down provide a natural medium for children's developing word awareness in meaningful contexts. Transposing children's spoken words into written symbols through dictation provides a concrete demonstration that strings of letters between spaces are words and that not all words are the same length. Studies by Clay (1979) and Bissex (1980) confirm the value of what many teachers have known and done for years: Teacher dictations of children's stories help develop word awareness, spelling, and the conventions of written language.

Many children enter kindergarten with at least some perfunctory knowledge of the alphabet letters. An important goal for the kindergarten teacher is to reinforce this skill by ensuring that children can recognize and discriminate these letter shapes with increasing ease and fluency (Mason 1980; Snow, Burns, & Griffin 1998). Children's proficiency in **letter naming** is a well-established predictor of their end-of-year achievement (Bond & Dykstra 1967; Riley 1996), probably because it mediates the ability to remember sounds. Generally a good rule according to current learning theory (Adams 1990) is to start with the more easily visualized uppercase letters, to be followed by identifying lowercase letters. In each case, introducing just a few letters at a time, rather than many, enhances mastery.

At about the time children are readily able to identify letter names, they begin to connect the letters with the sounds they hear. A fundamental insight in this phase of learning is that a letter and letter sequences map onto phonological forms. Phonemic awareness, however, is not merely a solitary insight or an instant ability (Juel 1991). It takes time and practice.

Children who are phonemically aware can think about and manipulate sounds in words. They know when words rhyme or do not; they know when words begin or end with the same sound; and they know that a word like *bat* is composed of three sounds /b/ /a/ /t/ and that these sounds can be blended into a spoken word. Popular rhyming books, for example, may draw children's attention to rhyming patterns, serving as a basis for

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extending vocabulary (Ehri & Robbins 1992). Using initial letter cues, children can learn many new words through analogy, taking the familiar word *bake* as a strategy for figuring out a new word, *lake*.

Further, as teachers engage children in shared writing, they can pause before writing a word, say it slowly, and stretch out the sounds as they write it. Such activities in the context of real reading and writing help children attend to the features of print and the alphabetic nature of English.

There is accumulated evidence that instructing children in phonemic awareness activities in kindergarten (and first grade) enhances reading achievement (Stanovich 1986; Lundberg, Frost, & Petersen 1988; Bryne & Fielding-Barnsley 1991, 1993, 1995). Although a large number of children will acquire phonemic awareness skills as they learn to read, an estimated 20% will not without additional training. A statement by the IRA (1998) indicates that "the likelihood of these students becoming successful as readers is slim to none . . . . This figure [20%], however, can be substantially reduced through more systematic attention to engagement with language early on in the child's home, preschool and kindergarten classes." A study by Hanson and Farrell (1995), for example, examined the long-term benefits of a carefully developed kindergarten curriculum that focused on word study and decoding skills, along with sets of stories so that children would be able to practice these skills in meaningful contexts. High school seniors who early on had received this type of instruction outperformed their counterparts on reading achievement, attitude toward schooling, grades, and attendance.

In kindergarten many children will begin to read some words through recognition or by processing letter-sound relations. Studies by Domico (1993) and Richgels (1995) suggest that children's ability to read words is tied to their ability to write words in a somewhat reciprocal relationship. The more opportunities children have to write, the greater the likelihood that they will reproduce spellings of words they have seen and heard. Though not conventional, these spellings likely show greater letter-sound correspondences and partial encoding of some parts of words, like *SWM* for *swim*, than do the inventions of preschoolers (Clay 1975).

To provide more intensive and extensive practice, some teachers try to integrate writing in other areas of the curriculum like literacy-related play (Neuman & Roskos 1992), and other project activities (Katz & Chard 1989). These types of projects engage children in using reading and writing for multiple purposes while they are learning about topics meaningful to them.

Early literacy activities teach children a great deal about writing and reading but often in ways that do not look much like traditional elementary school instruction. Capitalizing on the active and social nature of children's learning, early instruction must provide rich demonstrations, interactions, and models of literacy in the course of activities that make sense to young children. Children must also learn about the relation between oral and written language and the relation between letters, sounds, and words. In classrooms built around a wide variety of print activities, then in talking, reading, writing, playing, and listening to one another, children will want to read and write and feel capable that they can do so.

The primary grades

Instruction takes on a more formal nature as children move into the elementary grades. Here it is virtually certain that children will receive at least some instruction from a commercially published product, like a basal or literature anthology series.

Although research has clearly established that no one method is superior for all children (Bond & Dykstra 1967; Snow, Burns, & Griffin 1998), approaches that favor some type of **systematic code instruction along with meaningful connected reading** report children's superior progress in reading. Instruction should aim to teach the important letter-sound relationships, which once learned are practiced through having many opportunities to read. Most likely these research findings are a positive result of the Matthew Effect, the rich-get-richer effects that are embedded in such instruction: that is, children who acquire alphabetic coding skills begin to recognize many words (Stanovich 1986). As word recognition processes become more automatic, children are likely to allocate more attention to higher-level processes of comprehension. Since these reading experiences tend to be rewarding for children, they may read more often; thus reading achievement may be a by-product of reading enjoyment.

One of the hallmarks of skilled reading is **fluent, accurate word identification** (Juel, Griffith, & Gough 1986). Yet instruction in simply word calling with flashcards is not reading. Real reading is comprehension. Children need to read a wide variety of interesting, comprehensible materials, which they can read orally with about 90 to 95% accuracy (Durrell & Catterson 1980). In the beginning children are likely to read slowly and deliberately as they focus on exactly what's on the page. In fact they may seem "glued to print" (Chall 1983), figuring out the fine points of form at the word level. However, children's reading expression, fluency, and comprehension generally improve when they read familiar texts. Some authorities have found the practice of repeated rereadings in which children reread short selections significantly enhances their confidence, fluency, and comprehension in reading (Samuels 1979; Moyer 1982).

Children not only use their increasing knowledge of letter-sound patterns to read unfamiliar texts. They also use a variety of strategies. Studies reveal that early readers are capable of being intentional in their use of **metacognitive strategies** (Brown & DeLoache 1978; Rowe 1994). Even in these early grades, children make predictions about what they are to read,

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self-correct, reread, and question if necessary, giving evidence that they are able to adjust their reading when understanding breaks down. Teacher practices, such as the Directed Reading-Thinking Activity (DRTA), effectively model these strategies by helping children set purposes for reading, ask questions, and summarize ideas through the text (Stauffer 1970).

But children also need time for **independent practice**. These activities may take on numerous forms. Some research, for example, has demonstrated the powerful effects that children's reading to their caregivers has on promoting confidence as well as reading proficiency (Hannon 1995). Visiting the library and scheduling independent reading and writing periods in literacy-rich classrooms also provide children with opportunities to select books of their own choosing. They may engage in the social activities of reading with their peers, asking questions, and writing stories (Morrow & Weinstein 1986), all of which may nurture interest and appreciation for reading and writing.

Supportive relationships between these communication processes leads many teachers to **integrate reading and writing** in classroom instruction (Tierney & Shanahan 1991). After all, writing challenges children to actively think about print. As young authors struggle to express themselves, they come to grips with different written forms, syntactic patterns, and themes. They use writing for multiple purposes: to write descriptions, lists, and stories to communicate with others. It is important for teachers to expose children to a range of text forms, including stories, reports, and informational texts, and to help children select vocabulary and punctuate simple sentences that meet the demands of audience and purpose. Since handwriting instruction helps children communicate effectively, it should also be part of the writing process (McGee & Richgels 1996). Short lessons demonstrating certain letter formations tied to the publication of writing provide an ideal time for instruction. Reading and writing workshops, in which teachers provide small-group and individual instruction, may help children to develop the skills they need for communicating with others.

Although children's initial writing drafts will contain invented spellings, learning about spelling will take on increasing importance in these years (Henderson & Beers 1980; Richgels 1986). **Spelling instruction** should be an important component of the reading and writing program since it directly affects reading ability. Some teachers create their own spelling lists, focusing on words with common patterns, high-frequency words, as well as some personally meaningful words from the children's writing. Research indicates that seeing a word in print, imagining how it is spelled, and copying new words is an effective way of acquiring spellings (Barron 1980). Nevertheless, even though the teacher's goal is to foster more conventionalized forms, it is important to recognize that there is more to writing than just spelling and grammatically correct sentences. Rather, writing has been characterized by Applebee (1977) as "thinking with a pencil." It is true that children will need adult help to master the complexities of the writing process. But they also will need to learn that the power of writing is expressing one's own ideas in ways that can be understood by others.

As children's capabilities develop and become more fluent, instruction will turn from a central focus on helping children learn to read and write to helping them read and write to learn. Increasingly the emphasis for teachers will be on encouraging children to become **independent and productive readers**, helping them to extend their reasoning and comprehension abilities in learning about their world. Teachers will need to provide challenging materials that require children to analyze and think creatively and from different points of view. They also will need to ensure that children have practice in reading and writing (both in and out of school) and many opportunities to analyze topics, generate questions, and organize written responses for different purposes in meaningful activities.

Throughout these critical years **accurate assessment** of children's knowledge, skills, and dispositions in reading and writing will help teachers better match instruction with how and what children are learning. However, early reading and writing cannot simply be measured as a set of narrowly-defined skills on standardized tests. These measures often are not reliable or valid indicators of what children can do in typical practice, nor are they sensitive to language variation, culture, or the experiences of young children (Shepard & Smith 1988; Shepard 1994; Johnston 1997). Rather, a sound assessment should be anchored in real-life writing and reading tasks and continuously chronicle a wide range of children's literacy activities in different situations. Good assessment is essential to help teachers tailor appropriate instruction to young children and to know when and how much intensive instruction on any particular skill or strategy might be needed.

By the end of the third grade, children will still have much to learn about literacy. Clearly some will be further along the path to independent reading and writing than others. Yet with high-quality instruction, the majority of children will be able to decode words with a fair degree of facility, use a variety of strategies to adapt to different types of text, and be able to communicate effectively for multiple purposes using conventionalized spelling and punctuation. Most of all they will have come to see themselves as capable readers and writers, having mastered the complex set of attitudes, expectations, behaviors, and skills related to written language.

Statement of position

IRA and NAEYC believe that achieving high standards of literacy for every child in America is a shared responsibility of

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schools, early childhood programs, families, and communities. But teachers of young children, whether employed in preschools, child care programs, or elementary schools, have a unique responsibility to promote children's literacy development, based on the most current professional knowledge and research.

A review of research along with the collective wisdom and experience of members has led IRA and NAEYC to conclude that learning to read and write is a complex, multifaceted process that requires a wide variety of instructional approaches, a conclusion similar to that reached by an esteemed panel of experts for the National Academy of Sciences (Snow, Burns, & Griffin 1998).

Similarly, this review of research leads to a theoretical model of literacy learning and development as an interactive process. Research supports the view of the child as an active constructor of his or her own learning, while at the same time studies emphasize the critical role of the supportive, interested, engaged adult (e.g., teacher, parent, or tutor) who provides scaffolding for the child's development of greater skill and understanding (Mason & Sinha 1993; Riley 1996). The principle of learning is that "children are active learners, drawing on direct social and physical experience as well as culturally transmitted knowledge to construct their own understandings of the world around them" (Bredekamp & Copple 1997, 13).

IRA and NAEYC believe that goals and expectations for young children's achievement in reading and writing should be developmentally appropriate, that is, *challenging but achievable*, with sufficient adult support. A continuum of reading and writing development is generally accepted and useful for teachers in understanding the goals of literacy instruction and in assessing children's progress toward those goals. (An abbreviated continuum of reading and writing development appears on pp. 14-15; for more detailed examples, see Chall 1983; Education Department of Western Australia 1994; Whitmore & Goodman 1995; Snow, Burns, & Griffin 1998). Good teachers understand that children do not progress along this developmental continuum in rigid sequence. Rather, each child exhibits a unique pattern and timing in acquiring skills and understanding related to reading and writing.

Like other complex skills, reading and writing are outcomes that result from the continual interplay of development and learning, and therefore a range of individual variation is to be expected in the rate and pace at which children gain literacy skills. Given exposure to appropriate literacy experiences and good teaching during early childhood, most children learn to read at age six or seven, a few learn at four, some learn at five, and others need intensive individualized support to learn to read at eight or nine. Some children who do not explore books and other print during their early years are likely to need more focused support for literacy development when they enter an educational program, whether at preschool, kindergarten, or first grade (since preschool and even kindergarten attendance is not universal). Other children who enter school speaking little or no English are likely to need instructional strategies in their home language (Snow, Burns, & Griffin 1998).

Given the range within which children typically master reading, even with exposure to print-rich environments and good teaching, a developmentally appropriate expectation is for most children to achieve beginning conventional reading (also called early reading) by age seven. For children with disabilities or special learning needs, achievable but challenging goals for their individual reading and writing development in an inclusive environment are established by teachers, families, and specialists working in collaboration (DEC Task Force 1993; DEC/CEC 1994).

IRA and NAEYC believe that early childhood teachers need to understand the developmental continuum of reading and writing and be skilled in a variety of strategies to assess and support individual children's development and learning across the continuum. At the same time teachers must set developmentally appropriate literacy goals for young children and then adapt instructional strategies for children whose learning and development are advanced or lag behind those goals. Good teachers make instructional decisions based on their knowledge of reading and writing, current research, appropriate expectations, and their knowledge of individual children's strengths and needs.

A continuum of reading and writing development is useful for identifying challenging but achievable goals or benchmarks for children's literacy learning, remembering that individual variation is to be expected and supported. Using a developmental continuum enables teachers to assess individual children's progress against realistic goals and then adapt instruction to ensure that children continue to progress. During the preschool years most children can be expected to function in phase 1 of the developmental continuum, Awareness and Exploration. In kindergarten an appropriate expectation is that most children will be at phase 2, Experimental Reading and Writing. By the end of first grade, most children will function in phase 3, Early Reading and Writing. An appropriate expectation for second grade is Transitional Reading and Writing (phase 4), while the goal for third grade is Independent and Productive Reading and Writing (phase 5). Advanced Reading is the goal for fourth grade and above.

As fundamental as the principle of individual variation is the principle that human development and learning occur in and are influenced by social and cultural contexts. Language, reading, and writing are strongly shaped by culture. Children enter early childhood programs or schools having learned to communicate and make sense of their experiences at home and in their communities. When the ways of making and communicating meaning are similar at home and in school, children's transitions are eased. However, when the language and culture of the home and school are not congruent, teachers and par-

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ents must work together to help children strengthen and preserve their home language and culture while acquiring skills needed to participate in the shared culture of the school (NAEYC 1996a).

Most important, teachers must understand how children learn a second language and how this process applies to young children's literacy development. Teachers need to respect the child's home language and culture and use it as a base on which to build and extend children's language and literacy experiences. Unfortunately teachers too often react negatively to children's linguistic and cultural diversity, equating difference with deficit. Such situations hurt children whose abilities within their own cultural context are not recognized because they do not match the cultural expectations of the school. Failing to recognize children's strengths or capabilities, teachers may underestimate their competence. Competence is not tied to any particular language, dialect, or culture. Teachers should never use a child's dialect, language, or culture as a basis for making judgments about the child's intellect or capability. Linguistically and culturally diverse children bring multiple perspectives and impressive skills, such as code-switching (the ability to go back and forth between two languages to deepen conceptual understanding), to the tasks of learning to speak, read, and write a second language. These self-motivated, self-initiating, constructive thinking processes should be celebrated and used as rich teaching and learning resources for all children.

Recommended teaching practices

During the infant and toddler years. Children need relationships with caring adults who engage in many one-on-one, face-to-face interactions with them to support their oral language development and lay the foundation for later literacy learning. Important experiences and teaching behaviors include but are not limited to

- talking to babies and toddlers with simple language, frequent eye contact, and responsiveness to children's cues and language attempts;
- frequently playing with, talking to, singing to, and doing fingerplays with very young children;
- sharing cardboard books with babies and frequently reading to toddlers on the adult's lap or together with one or two other children; and
- providing simple art materials such as crayons, markers, and large paper for toddlers to explore and manipulate.

During the preschool years. Young children need developmentally appropriate experiences and teaching to support literacy learning. These include but are not limited to

- positive, nurturing relationships with adults who engage in responsive conversations with individual children, model reading and writing behavior, and foster children's interest in and enjoyment of reading and writing;
- print-rich environments that provide opportunities and tools for children to see and use written language for a variety of purposes, with teachers' drawing children's attention to specific letters and words;
- adults' daily reading of high-quality books to individual children or small groups, including books that positively reflect children's identity, home language, and culture;
- opportunities for children to talk about what is read and to focus on the sounds and parts of language as well as the meaning;
- teaching strategies and experiences that develop phonemic awareness, such as songs, fingerplays, games, poems, and stories in which phonemic patterns such as rhyme and alliteration are salient;
- opportunities to engage in play that incorporates literacy tools, such as writing grocery lists in dramatic play, making signs in block building, and using icons and words in exploring a computer game; and
- firsthand experiences that expand children's vocabulary, such as trips in the community and exposure to various tools, objects and materials.

In kindergarten and primary grades. Teachers should continue many of these same good practices with the goal of continually advancing children's learning and development (see the continuum of reading and writing development on pp. 40–41 for appropriate grade-level expectations). In addition every child is entitled to excellent instruction in reading and writing that includes but is not limited to

- daily experiences of being read to and independently reading meaningful and engaging stories and informational texts;
- a balanced instructional program that includes systematic code instruction along with meaningful reading and writing activities;
- daily opportunities and teacher support to write many kinds of texts for different purposes, including stories, lists, messages to others, poems, reports, and responses to literature;
- writing experiences that allow the flexibility to use nonconventional forms of writing at first (invented or phonic spelling) and over time move to conventional forms;
- opportunities to work in small groups for focused instruction and collaboration with other children;

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- an intellectually engaging and challenging curriculum that expands knowledge of the world and vocabulary; and
- adaptation of instructional strategies or more individualized instruction if the child fails to make expected progress in reading or when literacy skills are advanced.

Although experiences during the earliest years of life can have powerful long-term consequences, human beings are amazingly resilient and incredibly capable of learning throughout life. We should strengthen our resolve to ensure that every child has the benefit of positive early childhood experiences that support literacy development. At the same time, regardless of children's prior learning, schools have the responsibility to educate every child and to never give up even if later interventions must be more intensive and costly.

Recommended policies essential for achieving developmentally appropriate literacy experiences

Early childhood programs and elementary schools in America operate in widely differing contexts with varying levels of funding and resources. Regardless of the resources available, professionals have an ethical responsibility to teach, to the best of their ability, according to the standards of the profession. Nevertheless the kinds of practices advocated here are more likely to be implemented within an infrastructure of supportive policies and resources. IRA and NAEYC strongly recommend that the following policies be developed and adequately funded at the appropriate state or local levels:

1. ***A comprehensive, consistent system of early childhood professional preparation and ongoing professional development* (see Darling-Hammond 1997; Kagan & Cohen 1997).**

Such a professional preparation system is badly needed in every state to ensure that staff in early childhood programs and teachers in primary schools obtain specialized, college-level education that informs them about developmental patterns in early literacy learning and about research-based ways of teaching reading and writing during the early childhood years. Ongoing professional development is essential for teachers to stay current in an ever-expanding research base and to continually improve their teaching skills and the learning outcomes for children.

2. ***Sufficient resources to ensure adequate ratios of qualified teachers to children and small groups for individualizing instruction.***

For four- and five-year-olds, adult-child ratios should be no more than 1 adult for 8 to 10 children, with a maximum group size of 20 (Howes, Phillips, & Whitebook 1992; Cost, Quality, and Child Outcomes Study Team 1995). Optimum class size in the early grades is 15 to 18 with one teacher (Nye et al. 1992; Nye, Boyd-Zaharias, & Fulton 1994). Young children benefit most from being taught in small groups or as individuals. There will always be a wide range of individual differences among children. Small class size increases the likelihood that teachers will be able to accommodate children's diverse abilities and interests, strengths and needs.

3. ***Sufficient resources to ensure classroom, school, and public libraries that include a wide range of high-quality children's books, computer software, and multimedia resources at various levels of difficulty and reflecting various cultural and family backgrounds.***

Studies have found that a minimum of five books per child is necessary to provide even the most basic print-rich environment (Morrow & Weinstein 1986; Neuman & Roskos 1997). Computers and developmentally appropriate software should also be available to provide alternative, engaging, enriching literacy experiences (NAEYC 1996b).

4. ***Policies that promote children's continuous learning progress.***

When individual children do not make expected progress in literacy development, resources should be available to provide more individualized instruction, focused time, tutoring by trained and qualified tutors, or other individualized intervention strategies. These instructional strategies are used to accelerate children's learning instead of either grade retention or social promotion, neither of which has been proven effective in improving children's achievement (Shepard & Smith 1988).

5. ***Appropriate assessment strategies that promote children's learning and development.***

Teachers need to regularly and systematically use multiple indicators—observation of children's oral language, evaluation of children's work, and performance at authentic reading and writing tasks—to assess and monitor children's progress in reading and writing development, plan and adapt instruction, and communicate with parents (Shepard, Kagan, & Wurtz 1998). Group-administered, multiple-choice standardized achievement tests in reading and writing skills should not be used before third grade or preferably even before fourth grade. The younger the child, the more difficult it is to obtain valid and reliable indices of his or her development and learning using one-time test administrations. Standardized testing has a legitimate function, but on its own it tends to lead to standardized teaching—one approach fits all—the opposite of the kind of individualized diagnosis and teaching that is needed to help young children continue to progress in reading and writing.

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6. Access to regular, ongoing health care for every child.

Every young child needs to have a regular health care provider as well as screening for early diagnosis and treatment of vision and hearing problems. Chronic untreated middle-ear infections in the earliest years of life may delay language development, which in turn may delay reading development (Vernon-Feagans, Emanuel, & Blood 1992). Similarly, vision problems should never be allowed to go uncorrected, causing a child difficulty with reading and writing.

7. Increased public investment to ensure access to high-quality preschool and child care programs for all children who need them.

The National Academy of Sciences (Snow, Burns, & Griffin 1998) and decades of longitudinal research (see for example, Barnett 1995) demonstrate the benefits of preschool education for literacy learning. Unfortunately, there is no system to ensure accessible, affordable, high-quality early childhood education programs for all families who choose to use them (Kagan & Cohen 1997). As a result, preschool attendance varies considerably by family income; for example, 80% of four-year-olds whose families earn more than $50,000 per year attend preschool compared to approximately 50% of four-year-olds attending preschool from families earning less than $20,000 (NCES 1996). In addition, due primarily to inadequate funding, the quality of preschool and child care programs varies considerably, with studies finding that the majority of programs provide only mediocre quality and that only about 15% rate as good quality (Layzer, Goodson, & Moss 1993; Galinsky et al. 1994; Cost, Quality, & Child Outcomes Study Team 1995).

Conclusion

Collaboration between IRA and NAEYC is symbolic of the coming together of the two essential bodies of knowledge necessary to support literacy development of young children: knowledge about the processes of reading and writing and knowledge of child development and learning. Developmentally appropriate practices (Bredekamp & Copple 1997) in reading and writing are ways of teaching that consider

1. what is generally known about children's development and learning to set achievable but challenging goals for literacy learning and to plan learning experiences and teaching strategies that vary with the age and experience of the learners;
2. results of ongoing assessment of individual children's progress in reading and writing to plan next steps or to adapt instruction when children fail to make expected progress or are at advanced levels; and
3. social and cultural contexts in which children live so as to help them make sense of their learning experiences in relation to what they already know and are able to do.

To teach in developmentally appropriate ways, teachers must understand *both* the continuum of reading and writing development *and* children's individual and cultural variations. Teachers must recognize when variation is within the typical range and when intervention is necessary, because early intervention is more effective and less costly than later remediation.

Learning to read and write is one of the most important and powerful achievements in life. Its value is clearly seen in the faces of young children—the proud, confident smile of the capable reader contrasts sharply with the furrowed brow and sullen frown of the discouraged nonreader. Ensuring that all young children reach their potentials as readers and writers is the shared responsibility of teachers, administrators, families, and communities. Educators have a special responsibility to teach every child and not to blame children, families, or each other when the task is difficult. All responsible adults need to work together to help children become competent readers and writers.

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Continuum of Children's Development in Early Reading and Writing

Phase 1: Awareness and exploration (goals for preschool)

Children explore their environment and build the foundations for learning to read and write.

Children can

- enjoy listening to and discussing storybooks
- understand that print carries a message
- engage in reading and writing attempts
- identify labels and signs in their environment
- participate in rhyming games
- identify some letters and make some letter-sound matches
- use known letters or approximations of letters to represent written language (especially meaningful words like their name and phrases such as "I love you")

What teachers do

- share books with children, including Big Books, and model reading behaviors
- talk about letters by name and sounds
- establish a literacy-rich environment
- reread favorite stories
- engage children in language games
- promote literacy-related play activities
- encourage children to experiment with writing

What parents and family members can do

- talk with children, engage them in conversation, give names of things, show interest in what a child says
- read and reread stories with predictable text to children
- encourage children to recount experiences and describe ideas and events that are important to them
- visit the library regularly
- provide opportunities for children to draw and print, using markers, crayons, and pencils

Phase 2: Experimental reading and writing (goals for kindergarten)

Children develop basic concepts of print and begin to engage in and experiment with reading and writing.

Kindergartners can

- enjoy being read to and themselves retell simple narrative stories or informational texts
- use descriptive language to explain and explore
- recognize letters and letter-sound matches
- show familiarity with rhyming and beginning sounds
- understand left-to-right and top-to-bottom orientation and familiar concepts of print
- match spoken words with written ones
- begin to write letters of the alphabet and some high-frequency words

What teachers do

- encourage children to talk about reading and writing experiences
- provide many opportunities for children to explore and identify sound-symbol relationships in meaningful contexts
- help children to segment spoken words into individual sounds and blend the sounds into whole words (for example, by slowly writing a word and saying its sound)
- frequently read interesting and conceptually rich stories to children
- provide daily opportunities for children to write
- help children build a sight vocabulary
- create a literacy-rich environment for children to engage independently in reading and writing

What parents and family members can do

- daily read and reread narrative and informational stories to children
- encourage children's attempts at reading and writing
- allow children to participate in activities that involve writing and reading (for example, cooking, making grocery lists)
- play games that involve specific directions (such as "Simon Says")
- have conversations with children during mealtimes and throughout the day

Phase 3: Early reading and writing (goals for first grade)

Children begin to read simple stories and can write about a topic that is meaningful to them.

First-graders can

- read and retell familiar stories
- use strategies (rereading, predicting, questioning, contextualizing) when comprehension breaks down
- use reading and writing for various purposes on their own initiative
- orally read with reasonable fluency
- use letter-sound associations, word parts, and context to identify new words
- identify an increasing number of words by sight
- sound out and represent all substantial sounds in spelling a word
- write about topics that are personally meaningful
- attempt to use some punctuation and capitalization

What teachers do

- introduce new words and teach strategies for learning to spell new words
- demonstrate and model strategies to use when comprehension breaks down
- help children build lists of commonly used words from their writing and reading

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What parents and family members can do

- talk about favorite storybooks
- read to children and encourage them to read to you
- suggest that children write to friends and relatives
- bring to a parent-teacher s conference evidence of what your child can do in writing and reading
- encourage children to share what they have learned about their writing and reading

Phase 4: Transitional reading and writing (goals for second grade)

Children begin to read more fluently and write various text forms using simple and more complex sentences.

Second-graders can

- read with greater fluency
- use strategies more efficiently (rereading, questioning, and so on) when comprehension breaks down
- use word identification strategies with greater facility to unlock unknown words
- identify an increasing number of words by sight
- write about a range of topics to suit different audiences
- use common letter patterns and critical features to spell words
- punctuate simple sentences correctly and proofread their own work
- spend time reading daily and use reading to research topics

What teachers do

- create a climate that fosters analytic, evaluative, and reflective thinking
- teach children to write in multiple forms (stories, information, poems)
- ensure that children read a range of texts for a variety of purposes
- teach revising, editing, and proofreading skills
- teach strategies for spelling new and difficult words
- model enjoyment of reading

What parents and family members can do

- continue to read to children and encourage them to read to you
- engage children in activities that require reading and writing
- become involved in school activities
- show children your interest in their learning by displaying their written work
- visit the library regularly
- support your child s specific hobby or interest with reading materials and references

Phase 5: Independent and productive reading and writing (goals for third grade)

Children continue to extend and refine their reading and writing to suit varying purposes and audiences.

Third-graders can

- read fluently and enjoy reading
- use a range of strategies when drawing meaning from the text
- use word identification strategies appropriately and automatically when encountering unknown words
- recognize and discuss elements of different text structures
- make critical connections between texts
- write expressively in many different forms (stories, poems, reports)
- use a rich variety of vocabulary and sentences appropriate to text forms
- revise and edit their own writing during and after composing
- spell words correctly in final writing drafts

What teachers do

- provide opportunities daily for children to read, examine, and critically evaluate narrative and expository texts
- continue to create a climate that fosters critical reading and personal response
- teach children to examine ideas in texts
- encourage children to use writing as a tool for thinking and learning
- extend children s knowledge of the correct use of writing conventions
- emphasize the importance of correct spelling in finished written products
- create a climate that engages all children as a community of literacy learners

What parents and family members can do

- continue to support children s learning and interest by visiting the library and bookstores with them
- find ways to highlight children s progress in reading and writing
- stay in regular contact with your child s teachers about activities and progress in reading and writing
- encourage children to use and enjoy print for many purposes (such as recipes, directions, games, and sports)
- build a love of language in all its forms and engage children in conversation
- support the development of vocabulary by reading daily to the children, transcribing their language, and selecting materials that expand children s knowledge and language development
- model strategies and provide practice for identifying unknown words
- give children opportunities for independent reading and writing practice
- read, write, and discuss a range of different text types (poems, informational books)

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